

**Disposition of Radioactivity 72 Hours Following Dermal Application  
of 4 mg/kg [<sup>14</sup>C]DTBBA to Male Harlan Sprague Dawley Rats (Group M-A)<sup>a</sup>**

## Dose Recovered in Excreta (%)

End of Collection Period (h)	Urine CPDE <sup>b</sup>	Cage Rinse CPDE	Feces CPDE	GI Content	Total CPDE
4	0.0174 ± 0.0055	0.0132 ± 0.0088	–	–	0.0306
8	0.0458 ± 0.0228	0.0263 ± 0.0213	–	–	0.0721
12	0.127 ± 0.101	0.0596 ± 0.0439	–	–	0.186
24	0.458 ± 0.346	0.171 ± 0.109	0.782 ± 0.612	–	1.41
48	1.34 ± 0.89	0.344 ± 0.188	3.43 ± 2.29	–	5.12
72 <sup>c</sup>	2.45 ± 2.73	1.10 ± 1.32	6.40 ± 6.45	0.993 ± 1.537	11.8

## Disposition in Tissues

Tissue	nmol-eq/g Mean	nmol-eq/g SD	TBR <sup>e</sup> Mean	TBR SD	Percent Recovery Mean	Percent Recovery SD
Blood <sup>d</sup>	0.0407	0.0117	unity	–	0.0356	0.0094
Adipose <sup>d</sup>	0.0346	0.0117	0.841	0.051	0.0286	0.0090
Muscle <sup>d</sup>	0.356	0.480	8.53	10.41	1.66	2.18
Skin <sup>d</sup>	1.22	0.36	32.3	14.3	2.77	0.89
Brain	0.0290	0.0201	0.801	0.732	0.00231	0.00161
Heart	0.0157	0.0057	0.384	0.048	0.00063	0.00020
Kidneys	0.0507	0.0383	1.16	0.57	0.00406	0.00319
Liver	0.0469	0.0232	1.14	0.39	0.0201	0.0098
Lung	0.0398	0.0448	1.06	1.32	0.00219	0.00234
Spleen	0.0192	0.0062	0.470	0.063	0.00062	0.00016
Adrenals	0.0737	0.0273	1.81	0.40	0.00020	0.00008
Thymus	0.0296	0.0287	0.790	0.851	0.00057	0.00054
Thyroid	0.202	0.153	5.81	4.98	0.00020	0.00020
Urinary Bladder	0.260	0.375	5.81	7.31	0.00052	0.00068
Pancreas	0.0316	0.0125	0.761	0.093	0.00077	0.00031
Testes	0.0147	0.0029	0.370	0.062	0.00231	0.00038
Cecum	0.551	0.607	11.4	9.9	0.0110	0.0125
Large Intestine	0.160	0.192	3.39	3.07	0.00662	0.00794
Small Intestine	0.199	0.202	4.15	3.50	0.0299	0.0320
Stomach	0.0879	0.0671	1.97	1.13	0.00479	0.00344

## Disposition Summary–Dose Recovered (%)

Sample	Percent Recovered Mean	Percent Recovered SD
<b>Total Unabsorbed Dose</b>	53.4	19.9
Applicator	9.58	3.44
Tape/Glue	8.09	2.01
Dose Site Swipes	35.7	17.9
<b>Total Dose Site Skin</b>	3.49	1.49
<b>Total Absorbed Dose</b>	16.3	12.7
Urine + Cage Rinse	3.94	4.47
Urine	2.45	2.73
Cage Rinse	1.10	1.32
Feces	6.40	6.45
GI Content	0.99	1.53
Carcass	0.00	0.00
Tissues	4.58	1.92
<b>Total Recovered</b>	<b>73.2</b>	<b>23.7</b>

<sup>a</sup>All values expressed as mean ± standard deviation (SD) (N = 5). The target dose was 4 mg DTBBA/kg. The actual dose delivered was 4.00 ± 0.14 mg/kg (45.8 ± 1.6 µCi).

<sup>b</sup>CPDE = Cumulative percent dose excreted

<sup>c</sup>72 hour (h) urine collection included urine present in the urinary bladder at study termination.

<sup>d</sup>Tissue weights for the dispersed tissues were calculated using the following percentages of body weight: adipose 7.0%, blood 7.4%, muscle 40.4%, and skin 19% (International Life Sciences Institute, 1994).

<sup>e</sup>TBR = tissue to blood ratio